



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/788,521

02/27/2004

Josef Chalupper

P04,0054

6889

26574

7590

07/20/2009

SCHIFF HARDIN, LLP  
PATENT DEPARTMENT  
6600 SEARS TOWER  
CHICAGO, IL 60606-6473

EXAMINER

MONIKANG, GEORGE C

ART UNIT

PAPER NUMBER

2614

MAIL DATE

DELIVERY MODE

07/20/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/788,521	<b>Applicant(s)</b> CHALUPPER ET AL.	
	<b>Examiner</b> GEORGE C. MONIKANG	<b>Art Unit</b> 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 1-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 10/788,521.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 4/24/2009 have been fully considered but they are not persuasive.
2. With respect to applicant's arguments that the Niederdrank reference fails to disclose analyzing a first hearing aid to produce an analysis result. However, examiner maintains his stand. Since the applicant fails to claim what kind of analysis his first hearing aid performs, the first hearing aid of Niederdrank's analyses the acoustic field characteristics pertaining to a particular listener and transfers it to another hearing aid device (*Niederdrank, fig. 1: 1 & 2: abstract; col. 6, lines 24-32: the first hearing aid transmits its analysed parameters to the second hearing aid device so that the outputs of both hearing aids will match*).
3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2614

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 21-22, 24-27 & 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niederdrank, WO 02/28143 A2. (The Niederdrank reference is cited in IDS filed 3/27/2006).

Re Claim 21, Niederdrank discloses a method to automatically adjust a new hearing aid, comprising the steps of: bringing a first hearing aid, having an acoustic input and an acoustic output and that has been worn by a hearing-impaired person (fig. 2: 10 & 13; col. 4, lines 25-47: microphone 10 is acoustic input and speaker 13 is acoustic output), into active communication with a measurement device; from a processor, operating said measurement device to obtain, by said active communication with said first hearing aid, a detected operational characteristic of said first hearing aid that represents overall operation of said first hearing aid between said acoustic input and said acoustic output of said first hearing aid (fig. 2: 11; abstract; col. 4, lines 25-47: signal processor 11 of first hearing aid situated between the microphone acoustic input and speaker acoustic output operates the hearing aid 1 by possessing the input signals

Art Unit: 2614

according to the hearing needs of the hearing impaired person); supplying said operational characteristic of said first hearing aid from said measurement device to said processor and, in said processor, automatically analyzing said operational characteristic of said first hearing aid to obtain an analysis result (fig. 2: 11; abstract; col. 4, lines 25-47: signal processor 11 of first hearing aid situated between the microphone acoustic input and speaker acoustic output operates the hearing aid 1 by possessing the input signals according to the hearing needs of the hearing impaired person) and automatically determining, from said analysis result, setting parameters for electronic circuitry in a second hearing aid (fig. 1: 1 & 2: abstract; col. 6, lines 24-32: the first hearing aid transmits its processed parameters to the second hearing aid device so that the outputs of both hearing aids will match) placing said second hearing aid in active communication with a setting device that is connected to said processor; and from said processor (fig. 1: 1 & 2: abstract; col. 6, lines 24-32: second hearing aid is connected wirelessly to processor 11 of first hearing aid), setting said electronic circuitry in said second hearing aid with said setting parameters via said active communication between said setting device and said second hearing aid (fig. 1: 1 & 2: abstract; col. 6, lines 24-32: the first hearing aid transmits its processed parameters to the second hearing aid device so that the outputs of both hearing aids will match), but fails to explicitly disclose the second hearing aid replacing said first hearing aid as a new hearing aid to be worn by said hearing-impaired person. However, it would have been the designer's preference to modify the Niederdrank reference by using the second hearing to replace

Art Unit: 2614

the first hearing aid since both hearing aids have the same acoustic characteristics so the system can be used by individuals who are hearing impaired in only one ear.

Re Claim 22, Niederdrank discloses a method as claimed in claim 21 wherein said first hearing aid has a memory in which setting parameters for electronic circuitry in said first hearing aid are stored, and wherein the step of obtaining said operational characteristic from said first hearing aid comprises reading out said setting parameters from said memory of said first hearing aid and supplying said setting parameters read from the memory of the first hearing aid to said processor (col. 4, line 58 through col. 5, line 3), and wherein said second hearing aid has a memory connected to said electronic circuitry of said second hearing aid, and wherein the step of setting said electronic circuitry in said second hearing aid with said setting parameters determined from said operational characteristic of said first hearing aid comprises entering the setting parameters read from said memory of said first hearing aid into said memory of said second hearing aid (col. 4, line 58 through col. 5, line 3: acoustic characteristics from first hearing aid memory are transmitted to second hearing aid memory).

Re Claim 24, Niederdrank discloses a method as claimed in claim 21 wherein said measurement device is a first measurement device, and comprising placing said second hearing aid in active communication with a second measurement device, and operating said second measurement device from said processor to obtain an operational characteristic representing overall operation of said second hearing aid between an acoustic input thereof and an acoustic output thereof (fig. 1: 1 & 2: abstract; col. 6, lines 24-32: the first hearing aid transmits its processed parameters to the

Art Unit: 2614

second hearing aid device and second hearing aid processes the acoustic characteristics received from the first hearing aid and outputs a matching output to the first hearing aid).

Re Claim 25, Niederdrank discloses a method as claimed in claim 24 comprising, in said processor, automatically analyzing said operational characteristic of said second hearing aid and, from said operational characteristic of said second hearing aid, automatically determining modified setting parameters and, from said processor, re-adjusting said second hearing aid according to said modified setting parameters via said active communication between said second hearing aid and said setting device (fig. 1: 1 & 2: abstract; col. 6, lines 24-32: the first hearing aid transmits its processed parameters to the second hearing aid device so that the outputs of both hearing aids will match).

Claim 26 has been analyzed and rejected according to claim 21.

Claim 27 has been analyzed and rejected according to claim 22.

Claim 29 has been analyzed and rejected according to claim 24.

Claim 30 has been analyzed and rejected according to claim 25.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2614

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 23 & 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Niederdrank, WO 02/28143 A2, in view of Shennib, US Patent 5,825,894. (The

Niederdrank and Shennib references are cited in IDS filed 3/27/2006).

Re Claim 23, Niederdrank discloses a method as claimed in claim 21 wherein said measurement device comprises a speaker and a microphone, and wherein the step of obtaining said operational characteristic of said first hearing aid comprises emitting an acoustic signal from said speaker into said acoustic input of said first hearing aid and detecting an acoustic signal with said microphone from said acoustic output of said first hearing aid (fig. 2: 11; abstract; col. 4, lines 25-47: signal processor 11 of first hearing aid situated between the microphone acoustic input and speaker acoustic output operates the hearing aid 1 by possessing the input signals according to the hearing needs of the hearing impaired person); but fails to disclose wherein the step of automatically analyzing said operational characteristic of said first hearing aid comprises automatically identifying, as said analysis result, a transfer function of said



Art Unit: 2614

first hearing aid, between said acoustic input and said acoustic output, as a ratio of said signal supplied to said acoustic input of said first hearing aid and said signal emitted from said acoustic output of said first hearing aid. However, Shennib discloses a hearing aid that is capable of analyzing input signals and generating an ear canal transfer function for the user (*Shennib, abstract*). Therefore it would have been obvious to modify the hearing aids of Niederdrank with the ability to determine an ear canal transfer function as taught in Shinnib (*Shennib, abstract*) for the purpose of providing measurements that are directly correlated across all phases of hearing assessment.

Claim 28 has been analyzed and rejected according to claim 23.

### **Contact**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GEORGE C. MONIKANG whose telephone number is (571)270-1190. The examiner can normally be reached on M-F. alt Fri. Off 7:30am-5:00pm (est).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2614

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George C Monikang/  
Examiner, Art Unit 2614

6/25/2009

/Vivian Chin/  
Supervisory Patent Examiner, Art Unit 2614